

A taxonomic study of the genus *Erianthella* Descamps, 1975 (Orthoptera, Eumastacoidea, Chorotypidae) with descriptions of two new species from China

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Abstract: Three species of the genus *Erianthella* Descamps, 1975 are described and illustrated, including two new species *Erianthella lini* sp. n. and *Erianthella chani* sp. n. The new species *E. chani* sp. n. is similar to *E. formosana* Shiraki, 1910, but differs from the latter by the R vein of tegmen with 1 branch, M area of tegmen with intercalary vein, and tegmen with 1 small white spot. The new species *E. lini* sp. nov. is similar to *E. chani* sp. nov., but differs from the latter by the R vein of tegmen without branch, M vein of tegmen with 3 branches, and M area of tegmen without intercalary vein. A key to species of the genus is given.

Key words: Orthoptera; Eumastacoidea; Chorotypidae; *Erianthella*; new species; China

The genus *Erianthella* was erected by Descamps in 1975, belonging to superfamily Eumastacoidea, family Chorotypidae, subfamily Erianthinae, only one species in the world, *i. e.*, type species: *Erianthella formosana* Shiraki, 1910 [= *Erianthus formosana* Shiraki, 1910] distributed in Taiwan, China (Descamps, 1975; Eades *et al.*, 2012). During the identification of grasshopper specimens collected from Taiwan, two new species of the genus were found and described below. A key to species of the genus is given.

Descriptions and measurements were made under a stereomicroscope (Leica M 205 A, LAS V 4.0). All figures were made with a Canon 5D Mark II and Adobe Photoshop version 9.0 software. Additional sources for the description of sculpture (Descamps, 1975). The following abbreviations are used for morphology: R, radial vein; M, median vein; I, intercalary vein; AL, apical lobe of 10th abdominal tergite.

Type specimens and other materials are deposited in the National Museum of Natural Science, Taichung and Department of Entomology, Taiwan University, Taiwan, China.

Genus *Erianthella* Descamps, 1975

Descamps. 1975. *Ann. Soc. Ent. Fr. Nouvelle série*, 11

(1): 111; Otte, D. 1994. *Orthoptera Species File*. 2: 8; Yin, Shi, Yin, 1996. *Synonymic Catalogue of Grasshoppers and Their Allies of the World (Orthoptera: Caelifera)*. 791; Huang *et al.*, 2009. *Journal of Guangxi Normal University (Natural Science Edition)*, 27(1): 84–87.

Type species: *Erianthella formosana* (Shiraki, 1910) = *Erianthus formosanus* Shiraki. 1910.

Head higher than pronotum distinctly. Antennae shorter than fore femur, filiform, not more than 14 segments. Tegmina and wings developed, apex truncate. Spines of internal margin of caudal tibiae biseriolate in length and 10th abdominal tergite of male with two long and broad apical lobes.

The genus is allied to *Erianthus* Stål, 1875, but differs from the latter by the 10th abdominal tergite of male with two long and broad apical lobes.

1. *Erianthella formosana* (Shiraki, 1910) (Figs. 1–2)

Erianthus formosanus Shiraki, 1910. *Acrididen Japans*. 83; Karny, 1915. *Supplementa Entomologica*, 4: 82; Bolívar, 1930. *Trab. Mus. Cienc. Nat., Madrid (Ser. zool.)*, 46: 114; Descamps, 1974. *Bull. Mus. Natn. Hist. Nat. Paris (Zool. 3e ser)*, 237 (11): 1036.

Erianthella formosana; Descamps. 1975. *Ann. Soc. Ent. Fr. Nouvelle série*, 11(1): 111; Huang *et al.*, 2009. *Journal of Guangxi Normal University (Natural Science Edition)*, 27(1): 84–87.

Location of type specimens: Shiraki Collection, syntypes, 3 ♂♂.

Materials examined: Department of Entomology,

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References

- Bolívar C, 1930. Monografía de los Eumastacidos (Orth. Acrid.). *Trab. Mus. Cienc. Nat., Madrid (Ser. zool.)*, 46: 114.
- Descamps M, 1974. Diagnoses et Signalisations d' Eumastacoidea (Orthoptera). II. Indo-Malaisie. *Bull. Mus. Natn. Hist. Nat. Paris (Zool. 3e ser)*, 237(11): 1036.
- Descamps M, 1975. Revision du genre Erianthus Stål, 1875 (Orth. Eumastacoidea, Erianthinae). *Ann. Soc. Ent. Fr. Nouvelle série*, 11(1): 91–136.
- Eades DC, Otte D, Cigliano MM, Braun H, Orthoptera Species File Online. Version 2. 0/4. 0. [2012. 2]. <http://Orthoptera.SpeciesFile.org>.
- Huang JH, Huang Y, Zhou SY, 2009. Check list of Chinese species of superfamily Eumastacoidea (Orthoptera: Caelifera). *Journal of Guangxi Normal University (Natural Science Edition)*, 27(1): 84–87.
- Karny H, 1915. Sauter's Formosa-Ausbeute. Orthoptera et Oothecaria. *Suppl. Ent.*, 4: 82.
- Otte D, 1994. Orthoptera Species File. 2: 8.
- Shiraki T, 1910. Acridiiden Japans. Keiseisha, Tokyo 1–90, 2 pls.
- Yin XC, Shi JP, Yin Z, 1996. A Synonymic Catalogue of Grasshoppers and Their Allies of the World. China Forestry Publishing House, Beijing. 791.

中国小乌螞属的分类研究及二新种记述 (直翅目, 螞总科, 脊螞科)

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摘要: 本文对中国小乌螞属 *Erianthella* Descamps, 1975 进行了分类研究, 记述 3 种, 含 2 个新种——詹氏小乌螞 *Erianthella chani* sp. n. 和林氏小乌螞 *Erianthella lini* sp. n.。并编制了该属的种检索表。新种模式标本保存于我国台湾国立自然博物馆。

关键词: 直翅目; 螞总科; 脊螞科; 小乌螞属; 新种; 中国

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附录: 新种简记

1. 詹氏小乌螞, 新种 *Erianthella chani* sp. nov. (图 3~7)

该新种同台湾小乌螞 *E. formosana* (Shiraki, 1910) 近似, 不同之处为前翅 R 脉 1 个分支, 前翅中脉域具闰脉, 前翅具 1 个白色小斑。

体长: ♂ 18.1 mm。前胸背板长: ♂ 3.2 mm。前翅长: ♂ 12.8 mm。后足股节长: ♂ 11.8 mm。

正模: ♂, 台湾: 高雄, 2000-VII-6–7, 詹美铃采。

雌性不知。

词源: 本新种名 *chani* (詹氏), 为了感谢詹美铃女士采集模式标本而命名。

2. 林氏小乌螞, 新种 *Erianthella lini* sp. nov. (图 8~11)

该新种同詹氏小乌螞 *Erianthella chani* sp. n. 近似, 不同之处为前翅 R 脉不分支, 前翅中脉具 3 个分支, 前翅中脉域缺闰脉。

体长: ♂ 17.8 mm。前胸背板长: ♂ 3.0 mm。前翅长: ♂ 13.5 mm。后足股节长: ♂ 11.2 mm。

正模: ♂, 台湾: 高雄, 1995-VI-21–24, 林政行、詹美铃采。

雌性不知。

词源: 本新种名 *lini* (林氏), 为了感谢林政行教授采集模式标本而命名。

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